#### **EGUs - Relevant Recommendations**

- Establish 2 sets of standards for fossil fuel electric generating units (EGUs):
  - 1) state of the art (SOTA) efficiency standards for new generation to allow NJEDA to use RGGI revenue to fund new efficient EGUs; and
  - 2) minimum CO2 emissions performance standards that would apply to all new fossil fuel fired EGUs, including coal, oil and gas, and would be based on the efficient combustion of natural gas.

#### **EGUs - Focus Questions**

- Is it appropriate to have a cap-and-trade approach for existing EGUs and a performance standard for new EGUs?
- What is the most effective approach to establishing performance standard for new EGUs? Minimum efficiency? Maximum heat rate? Should the standards be fuel specific or fuel neutral? Should standards be different for different size units? Should standards be based on currently commercially available technology or be technology forcing?
- For existing EGUs, are additional regulatory approaches needed to compliment a cap-and-trade system?
- Should requirements be set, with what deadline, to promote the implementation of carbon capture and sequestration?

### **Industry - Relevant Recommendations**

- Within 6 months, and with input from the business community and other stakeholders, the State will lay out an approach and schedule for regulatory actions (i.e. performance standards, cap-and-trade, mandatory planning) to address GHG emissions reductions in the industrial sector using, to the greatest extent possible, existing authorities.
- GHG releases (CO2 and methane) 2004 Emission Statement

GHG Subsector	NAICS Codes	# of Facilities	CO2eMMT	% of Sector
Refineries	324	6	7.267	42.5%
Mineral Wool	327	1	0.936	5.5%
Pharmaceutical	3254	15	0.636	3.7%
Iron and steel	331	10	0.591	3.5%
Food	311 and 312	12	0.385	2.3%
Glass	327	8	0.378	2.2%
Paper	322	19	0.266	1.6%
Chemical	3251	15	0.238	1.4%
Mining	212	7	0.210	1.2%
Plastics	3252 and 326	16	0.199	1.2%

## **Industry- Focus Questions**

- What is the right mechanism for regulation? Cap-and-trade? performance standards? Best Management Practices (in cooperation with BPU)?
  Compliance/technical assistance? Some combination?
- What needs to be considered when applying these regulatory mechanisms to the various industry sectors?
- How do we maximize the environmental gains achieved through these regulatory mechanisms, while minimizing the economic impacts to industry?

#### **Waste - Relevant Recommendations**

Achieve the statutorily-required 50% Municipal Solid Waste (MSW) recycling goal and exceed the goal to achieve a 70% MSW recycling rate by 2020, with an ultimate goal of zero waste production by 2050. This would be accomplished by using funds from the Recycling Enhancement Act to target recycling materials (plastics, metals, aluminum, and organics) in the waste stream that can achieve maximum GHG reductions.

Beyond addressing traditional MSW issues, the State will begin to determine how to more sustainably deal with other waste products through demonstration projects such as:

- Expand the practice of using anaerobic digester gases generated at POTWs for energy generation;
- Promote environmentally positive demonstration project to convert MSW to useable fuels; and
- Develop guidance and support for waste grease conversion to liquid fuel.

#### **Waste - Relevant Recommendations**

 By 2009, NJDEP will propose amendments to its landfill closure regulations to require installation of flares and/or energy recovery systems at landfills where gas continues to be generated, and such a system is feasible. In the interim, NJDEP will encourage landfill owners to complete feasibility assessments, and implement capture mechanisms where feasible.

#### **Waste - Relevant Recommendations**

 Provide favorable financing, through The New Jersey Environmental Infrastructure Trust (EIT) Financing Program, to local government units (such as municipal utilities authorities) to install energy efficiency and/or GHG reduction measures at Publicly Owned Treatment Works (POTWs).

#### **Waste - Focus Questions**

- With respect to the inorganic waste stream, the draft report sets a long term goal of zero waste by 2050. What policies and/or mechanisms need to be put in place over the next two years to accomplish this goal? Legislation? Regulations? Fees/taxes (e.g., point of purchase tax)? Incentives (e.g., for product and packaging manufacturers)? See chart on next slide
- With respect to the organic waste stream, what policies and/or mechanisms need to be put in place over the next two years to accomplish this goal? Legislation? Regulations? Fees/taxes? Incentives?
- For the organic portion of the waste stream, what are the most promising technologies, from a lifecycle assessment, (e.g., composting, digestion, fuel production, disposal with energy recovery)? Can you share models/examples where these technologies are being implemented successfully?

# **Waste - Focus Questions**

	Reduce	Reuse	Recycle
Legislation			
Regulation			
Taxes and fees			
Incentives			

#### **Waste - Focus Questions**

- What are the most promising technologies, from a lifecycle assessment, that offer an alternative to landfills or incineration? Gasification? Plasma gasification? Pyrolysis? Others?
- For those most promising technologies, what policies and/or mechanisms need to be put in place over the next two years to accomplish this goal? Legislation? Regulations? Fees/taxes (e.g., point of purchase tax)? Incentives (e.g., for product and packaging manufacturers)?
- In addressing the waste that does end up in landfills,
  - What is the appropriate amount of landfill gas emissions for which energy recovery should be mandatory?
  - Are the current requirements for air pollution control of landfill gases, if volatile organic substance emissions exceed 3.5 lbs/hr, sufficient? Should there be a separate cutpoint and standard for methane emissions?
  - should requirements for the capture of landfill gases be strengthened?
    How?
  - Since the state cannot dictate where waste goes, as this is a commerce issue, each county determines their waste streams to some degree. Therefore, for any waste to energy facility, how can the State identify the waste source and determine that it's a suitable energy source?

#### Water - Relevant Recommendations

 Work with the Legislature to expand existing home water-related infrastructure retrofit requirements (i.e. retrofitting all properties with water efficient fixtures and appliances) to aid in bringing older homes up to date with current technology.

#### **Water - Focus Questions**

- What are your thoughts with respect to the recommendation included in the draft report?
- What are your thoughts with respect to including additional recommendations, such as:
  - incentive-based measures (i.e., interest-free funding assistance, loans, appliance/fixture rebates, etc.)
  - innovative water rate structures be useful as a means of influencing user behavior (i.e., decreasing water waste)
  - measures to increase irrigation efficiency and/or limit outdoor water waste?
  - Measures to minimize unnecessary or excessive water transfers (i.e., pumping water for storage and transfer between water systems)